

The impact of COVID-19 on **chronic disease prevention and management**

This Vital Focus report looks back on the secondary effects of the pandemic on chronic disease prevention and management. The pandemic is not over but, in some ways, where we are today looks different from where we were a year ago, with many people vaccinated against COVID-19. At the same time, the rise of the Omicron variant has once again led to restrictions to slow the spread of this virus.

The pandemic changed how people access healthcare in a way that could increase the risk of developing chronic diseases and the severity of people's illness. By understanding how COVID-19 impacted the prevention and management of chronic diseases we can learn what is needed for the future.

The impact of COVID-19 on chronic disease in our community

Chronic diseases are the primary causes of death and disability in the world.^{8.1} Management of chronic diseases requires people to have access to health care services. Unmanaged chronic diseases are often more costly as a result of significant morbidity (rate of disease in a population) and mortality (rate of death in a population).^{8.2} Chronic disease prevention and management services have been severely disrupted since the COVID-19 pandemic began,^{8.1,8.3} impacting the health and wellbeing of those living with a chronic disease.



People living with a chronic disease often require medication and other supports from health care providers. Disruption in health care services has impacted their health and wellbeing.

What is a chronic disease?

Chronic diseases are long-term illnesses that do not get better on their own and often get worse over time.^{8.4} In Ontario, cancer, cardiovascular diseases (such as heart failure and stroke), diabetes, and respiratory diseases (such as chronic obstructive pulmonary disease (COPD) and asthma) are the leading causes of chronic disease related deaths.^{8.5} These illnesses can often be managed but are rarely cured completely. In order to manage their illness and prevent complications, people living with a chronic disease often require medication and other supports from health care providers to achieve and maintain their health.

How has COVID-19 impacted the prevention and management of chronic diseases?

The COVID-19 pandemic has impacted social and economic factors that affect the prevention and management of chronic diseases.^{8.9} Our health is impacted by our living conditions and experiences.^{8.10} Income, employment, housing, education, race and gender are considered key contributors to an individual's health.^{8.9,8.10} For example, lower income can affect one's ability to afford nutritious foods; poor nutrition is a known contributor to increased risk of chronic diseases, such as cardiovascular diseases^{8.9,8.12,8.13} and diabetes.^{8.9,8.14}

Additionally, increased social isolation and fear of contracting the COVID-19 virus may lead to an increase in stress and anxiety.^{8.9,8.12,8.13,8.14,8.15} In turn, stress and anxiety are associated with an increased risk of cardiovascular events (such as heart attack and stroke), heart failure complications, and mortality due to cardiovascular diseases.^{8.9,8.16,8.17}

People who have been diagnosed with a chronic disease are at a higher risk of severe COVID-19 illness if they contract the virus.^{8.1} Additionally, increased demand on health care resources in response to the pandemic compromises the availability of services and care required to effectively manage chronic diseases. Data from 2019 and 2020 highlight the impact that COVID-19 has had on our health care system's capacity to identify, monitor, and manage chronic diseases and treat complications when they arise.

What does chronic disease look like locally?

Chronic disease is the leading cause of death in Ontario, accounting for almost three-quarters of all deaths.^{8,5}

In 2017, the incidence (number of new cases within the calendar year) of chronic diseases in Wellington-Dufferin-Guelph was:^{8,6,8,7}

- **1,644 cases of hypertension*** per 100,000 people age 20 years and older
- **658 cases of diabetes** per 100,000 people age 20 years and older
- **500 cases of COPD** per 100,000 people age 20 years and older
- **539 cases of cancer** per 100,000 people of all ages (In 2018, there were 532 cases of cancer per 100,000 people.)

In 2019, the hospitalizations for chronic diseases (per 100,000 people of all ages) in Wellington-Dufferin-Guelph were:^{8,8}

- **988 hospitalizations due to cardiovascular diseases**
- **319 hospitalizations for ischemic heart disease** (which can lead to heart attack)
- **125 hospitalizations for stroke**
- **231 hospitalizations for COPD**
- **121 hospitalizations for diabetes**

Other impacts of the COVID-19 pandemic which have implications for chronic disease prevention and management include:

Decreased physical activity

8.9,8.12,8.14,8.17,8.18,8.19,8.20,8.21,8.22

Reduced availability of public transportation

8.1,8.2

Fewer routine and/or in-person medical appointments

8.2,8.12,8.21,8.23,8.24,8.25

A reduction or pause in preventative screening programs

8.1,8.26

Postponed and cancelled non-emergency procedures (especially during the initial phase of the pandemic)

8.2,8.12,8.21,8.22,8.24,8.27

An avoidance of seeking emergency care due to possible fears of contracting COVID-19

8.2,8.18,8.24,8.28

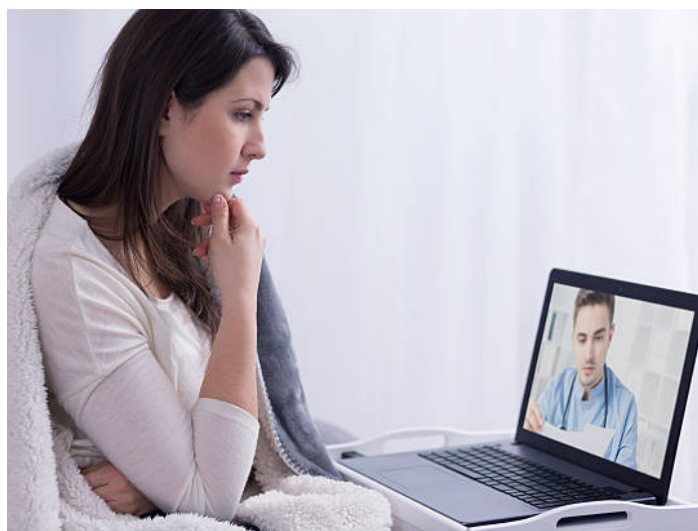
In Ontario,

from March to July 2020, compared March to July 2019^{8,41}:

- In general, fewer people were seen by Primary Care Providers.
 - There was a **28% decrease** in the total number of primary care visits (office and virtual). However:
 - total visits decreased less for those with higher health care needs (for example, total visits for older adults decreased by **19%**); and
 - total visits increased by **6.4%** for those living in rural areas.
- There was a decrease in office visits and an increase in virtual visits.
 - There was a **79% decrease** in office visits.
 - There were **56 times more virtual visits**, with virtual visits making up **71%** of all primary care visits from March to July 2020.

In Canada^{8,42}:

- Since the start of the pandemic, there was a large decrease in in-person visits for chronic disease management.
 - In-person specialist visits for chronic disease management decreased by between **68%** and **94%** when comparing April 2019 to April 2020.
- **2 out of 3** Canadians living with chronic disease had a hard time accessing care in 2020.



In Ontario during the pandemic, there was a large increase in virtual consultations with specialists for people with chronic diseases. Although not always a good replacement for in-person care, virtual consultations may have, in part, made up for the huge decrease in in-person appointments.^{8,42}

Recommendations

As we move through the pandemic, it is critical that we learn from our experiences to inform proactive responses and actions that support chronic disease prevention and management. Health care providers are already working to implement some of the following recommendations:

1. Reduce barriers for people unable to access health care by providing alternative methods of care, including:^{8,2}

- Telemedicine and virtual care.
8.1,8.12,8.13,8.15,8.18,8.19,8.22,8.30,8.31,8.32,8.33,8.34
- Home testing and delivery of medications.^{8.12,8.29}
- Apps to facilitate self-management and reporting.
8.12,8.15,8.30,8.31
- Face-to-face appointments when possible, with safety measures in place.^{8.18,8.30}
- Earlier follow-up with patients.^{8.18}
- The adoption of triaging programs for primary, secondary and tertiary care.^{8.1}

2. Develop a preventative model of care to support health care providers to monitor patients through:^{8,29}

- Reach-outs to patients whose appointments and/or treatments have been postponed or cancelled.^{8,29}
- Medication review or creating an accurate list of all medication that a patient is taking.^{8,29}
- Regular screening of patients where physicians can ask targeted questions about health care behaviours that may impact chronic diseases.^{8.15, 8.29}
- Screening for psychological stress or trauma by trained professionals who use a trauma-informed approach, and are able to make referrals or connect patients to services and supports.^{8.15,8.35}

3. Improve accessibility to health care for chronic diseases through:

- Increasing public transit to health care settings (such as clinics and hospitals).^{8.1,8.22}
- Communicating messages to patients who may be hesitant to get medical help, about the safety measures in place at health care settings and the importance of regular screening and monitoring.^{8.28,8.29}
- Dispensing a greater supply of medicine (if available and appropriate to do so) to patients to reduce the number of visits to a healthcare provider or pharmacy.^{8.36,8.37}
- Implementing health literacy programs to improve health knowledge among the population.^{8.22,8.23}
- Applying the teach-back method to check patients' understanding when using virtual care by asking them to explain (in their own words) what they need to know or do about their health.^{8.23}
- Providing patient education on how to access and use virtual care programs.^{8.23,8.31}
- Providing free, online self-management programs.^{8.36}

4. Build capacity with and provide funding for community partners to increase affordable access to physical activity that can be done at home, outdoors or online (such as online fitness programs or classes).^{8.9,8.16,8.21,8.36}

5. Partner with community organizations (such as schools, municipalities, libraries, faith groups, community groups, and pharmacies)^{8,22} to support physical activity messaging and literacy through print and digital methods of communication.^{8.9,8.12,8.19,8.36,8.39}

6. Advocate for supportive policies and programs that address income as the root cause of food insecurity.^{8,40}

7. Support and raise awareness about programs that offer nutritious foods that are accessible and affordable for vulnerable populations.^{8.9,8.15,8.16}

Footnotes and references are available at [Toward Common Ground](#).

*Hypertension is not a cardiovascular disease. However, it is considered a major cardiovascular disease risk factor.^{8.5}

We gratefully acknowledge City of Guelph for providing funding to support the design of this report.

Note: There are limitations associated with the data and research sources included in this Vital Focus. For more information about sources and citations, please go to [Toward Common Ground](#). If you know of research or data about diverse communities not represented in this Vital Focus, please contact us at sarahh@towardcommonground.ca

For more information about preventing chronic diseases, or if you are living with a chronic disease and need support with managing your illness:

Contact your primary care provider, or Call Telehealth Ontario at 1-866-797-0000 (TTY 1-866-797-0007) to speak with a registered nurse.